

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

BIO-RAD LABORATORIES, INC., THE)	
UNIVERSITY OF CHICAGO,)	
LAWRENCE LIVERMORE NATIONAL)	
SECURITY LLC, and PRESIDENT AND)	
FELLOWS OF HARVARD COLLEGE,)	C.A. No. 20-cv-506-RGA
)	
Plaintiffs,)	
)	
v.)	
)	Part 1 of 2
DROPWORKS, INC.,)	Exhibits 1-14
)	
Defendant.)	

JOINT CLAIM CONSTRUCTION CHART

Pursuant to Paragraph Seven of the Court’s Scheduling Order (D.I. 22), as amended by the Court’s Order on the Stipulation to Amend the Schedule (D.I. 76), Plaintiffs Bio-Rad Laboratories, Inc., the University of Chicago, Lawrence Livermore National Security LLC, and President and Fellows of Harvard College (collectively, “Plaintiffs”) and Defendant Dropworks, Inc. (“Defendant”) hereby submit a Joint Claim Construction Chart identifying for the Court the claim terms of U.S. Patent No. 8,304,193 (the “193 Patent”), U.S. Patent No. 8,822,148 (the “148 Patent”), U.S. Patent No. RE41,780 (the “780 Patent”), U.S. Patent No. RE43,365 (the “365 Patent”), U.S. Patent No. 9,132,394 (the “394 Patent”), U.S. Patent No. 9,127,310 (the “310 Patent”), and U.S. Patent No. 9,056,289 (the “289 Patent”) for which the parties have reached agreed-upon constructions, as well as claim terms for which the parties have a dispute, together with the parties’ proposed constructions of the disputed claim terms and citations to the supporting intrinsic evidence.

EXHIBITS

Exhibit No.	Document Description
1	U.S. Patent No. 8,304,193
2	U.S. Patent No. 8,822,148
3	U.S. Patent No. RE41,780
4	U.S. Patent No. RE43,365
5	U.S. Patent No. 9,132,394
6	U.S. Patent No. 9,127,310
7	U.S. Patent No. 9,056,289
8	Excerpts of Prosecution History of U.S. 8,822,148
9	Excerpts of Prosecution History of U.S. 8,304,193
10	U.S. Provisional Application No. 60/379,927
11	U.S. Provisional Application No. 60/394,544
12	Excerpts of Prosecution History of U.S. Patent No. RE43,365
13	Excerpts of Prosecution History of U.S. 9,132,394
14	U.S. Provisional Application No. 61/277,203
15	U.S. Provisional Application No. 61/317,635
16	U.S. Provisional Application No. 61/467,347
17	Excerpts of Prosecution History of U.S. Patent No. RE41,780
18	U.S. Patent No. 6,057,149
19	U.S. Patent No. 6,130,098
20	U.S. Patent No. 6,140,053
21	Excerpts of Prosecution History of U.S. 7,041,481
22	Excerpt of Prosecution History of U.S. 7,901,939
23	U.S. Patent No. 9,156,010
24	Response to First Office Action in Ex Parte Reexamination of U.S. Patent No. 8,304,193, dated June 12, 2018
25	10X Genomics, Inc., v. The University of Chicago, IPR2015-01156, Paper No. 14, Decision Denying Institution of <i>Inter Partes</i> Review
26	10X Genomics, Inc., v. The University of Chicago, IPR2015-01163, Paper No. 14, Decision Denying Institution of <i>Inter Partes</i> Review
27	N.R. Beer et al., On-Chip, Real-Time, Single Copy Polymerase Chain Reaction in Picoliter Droplets, 79 Anal. Chem. 8471-8475 (2007)
28	M.A. Burns et al., An Integrated Nanoliter DNA Analysis Device, 282 Science 484-487 (1998)
29	O. Kalinina et al., Nanoliter Scale PCR with TaqMan Detection, 25 Nucleic Acids Research 1999-2004 (1997)
30	M. Nakano et al., Single-molecule PCR using water-in-oil emulsion, 102 Journal of Biotechnology 117-124 (2003)
31	G.H. Seong et al., Fabrication of Microchambers Defined by Photopolymerized Hydrogels and Weirs within Microfluidic Systems: Application to DNA Hybridization, 74 Analytical Chemistry 3372-3377 (2002)

AGREED-UPON CONSTRUCTIONS

Claim Term(s)	Parties' Agreed-Upon Construction
<p>“plugs of the aqueous fluid” / “plug of the aqueous fluid”</p> <p>148 Patent, claim 1; 193 Patent, claim 1</p>	<p>“volume(s) of aqueous fluid formed when a stream of aqueous fluid is introduced into the flow of a substantially immiscible carrier-fluid”</p>
<p>“Poisson distribution”</p> <p>148 Patent, claim 1</p>	<p>“distribution of target DNA or RNA molecules in plugs where there is an equal and independent probability for each target DNA or RNA molecule to be distributed into any one of a number of plugs”</p>
<p>“identification element”</p> <p>289 Patent, claim 19</p>	<p>“a species that includes a component that can be determined in some fashion”</p>

DISPUTED CONSTRUCTIONS

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
<p>“A method for conducting an autocatalytic reaction in plugs in a microfluidic system”</p> <p>193 Patent, claim 1</p>	<p>The preamble is limiting and requires conducting an autocatalytic reaction in a microfluidic system.</p> <p><u>Intrinsic Evidence:</u> <i>See, e.g.</i>, 193 Patent, Claims 1, 5, 10</p> <p><i>See, e.g.</i>, 193 Patent, Figs. 16, 46-54</p> <p><i>See, e.g.</i>, 193 Patent, Abstract, 1:18-40; 2:11-15,</p>	<p>The preamble is limiting and requires conducting the autocatalytic reaction on-chip.</p> <p><u>Intrinsic Evidence:</u> <u>'193 Patent</u> 1:22-24, 6:22-26 & Fig. 40, 6:42-44 & Fig. 45, 11:13-23, 23:36-67, 39:31-55, 49:44-50, 49:56-50:3, 69:14-20.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<p>2:54-63; 6:49-7:19; 7:32-41; 7:45-63; 8:8-17; 8:50-56; 9:13-16; 10:48-11:23; 11:45-53; 12:29-37; 12:60-13:7; 14:28-41; 15:60-16:34; 16:41-52; 17:3-23; 17:65-18:13; 21:40-44; 25:24-35; 28:40-56; 29:67-30:31; 33:1-25; 36:20-25, 37:53-60; 40:48-42:10; 47:57-61; 49:31-55; 54:60-55:56; 57:50-58:5; 58:33-59:32; 75:27-77:3</p> <p><i>See, e.g.,</i> U.S. Provisional Application No. 60/394,544, 3:13-14; 3:22-23; 3:31-32; 6:29-7:2; 10:6-7; 19:2-3; 20:18-19; 20:30-31; 28:29-30.</p> <p><i>See, e.g.,</i> U.S. Provisional Application No. 60/379,927, 3:12-13; 3:21-22; 3:30-31; 9:8-9; 20:15-16.</p> <p><i>See, e.g.,</i> 193 Patent File History</p> <ul style="list-style-type: none"> • January 31, 2012 Office Action • July 27, 2012 Applicant Amendment and Response • July 27, 2012 Interview Summary • August 7, 2012 Notice of Allowance and Examiner's Amendment <p>Plaintiffs also cite any additional intrinsic evidence identified for this claim term in the Joint Claim Construction Brief (D.I. 93) submitted in <i>RainDance Technologies, Inc. and University of Chicago v. 10X Genomics, Inc.</i>, 1:15-cv-00152-RGA (D. Del.).</p>	<p><u>'193 Patent File History</u></p> <p>Notice of Allowability & Examiner's Amendment (Aug. 7, 2012) at 2-3.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
<p>“forming at least one plug of the aqueous fluid containing the at least one substrate molecule and reagents by partitioning the aqueous fluid with the flowing oil at the junction of the at least two channels”</p> <p>193 Patent, claim 1</p>	<p>Plain and ordinary meaning.</p> <p><u>Intrinsic Evidence:</u> <i>See, e.g.</i>, 193 Patent, 3:50-56, 5:5-15, 8:30-41, 9:27-10:11, 14:38-15:5, 15:18-34, 15:46-59, 17:24-21:67, 22:34-38, 24:14-17, 33:43-51, 33:57-34:17, 34:23-26, 34:51-66, 54:57-55:10, 55:40-50, 61:50-62:10, 62:31-61, 77:4-40</p> <p><i>See, e.g.</i>, 193 Patent, Figs. 2-5, 8, 9, 17, 25, 26, 44, 51, 52</p> <p><i>See, e.g.</i>, 193 Patent File History:</p> <ul style="list-style-type: none"> • July 11, 2011 Non-Final Rejection • December 16, 2011 Applicant Amendment and Request for Reconsideration After Non-Final Rejection • January 31, 2012 Final Rejection • July 27, 2012 Applicant Response After Final Action • August 7, 2012 Notice of Allowance and Examiner's Amendment 	<p>“forming at least one plug of the aqueous fluid containing the at least one substrate molecule and reagents by introducing a continuously flowing stream of at least one plug fluid into the flowing oil at the junction of the at least two channels”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'193 Patent</u></p> <p>5:5-10 & Fig. 25, 5:11-15 & Fig. 26, 9:27-30, 9:61-67, 15:18-24, 15:46-52, 17:28-36, 17:37-43 & Fig. 2A, 19:35-44, 21:33-35, 21:45-47, 26:12-22, 33:43-51, 34:44-35:2 & Fig. 44, 38:1-9, 39:31-41, 47:13-26, 55:40-52 & Fig. 17, 59:48-53, 59:61-60:5, 60:53-61, 61:60-62:29 & Fig. 45, 62:39-52 & Fig. 26, 70:40-51 & Fig. 25, 72:30-36, 76:1-5, 76:37-56, 77:14-24 & Fig. 50, 77:25-39 & Fig. 51, 77:59-78:6 & Fig. 54.</p> <p><u>'193 Patent File History</u></p> <p>Notice of Allowability & Examiner's Amendment (Aug. 7, 2012) at 2-4.</p> <p><u>'193 Patent Reexamination</u></p> <p>Patentee Response (June 12, 2018) at 20-21 and Ex. 2001 (Sia Decl.) ¶ 64.</p> <p><u>IPR2015-01163</u></p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
		<p>Decision Denying Institution (Paper No. 14) at 7-8.</p> <p><u>IPR2015-01156</u></p> <p>Decision Denying Institution (Paper No. 14) at 7-8.</p> <p><u>'148 Patent File History</u></p> <p>Amendment & Response (June 27, 2013) at 3, 5-6.</p>
<p>“a mixing step”</p> <p>193 Patent, claim 12</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 193 Patent, 3:63-4:15, 4:26-34, 4:50-53, 5:5-31, 8:42-49, 10:1-11; 11:64-12:8, 12:39-41, 12:44-57, 15:18-34, 17:28-31, 17:37-18:21, 18:60-19:6, 22:1-27:5, 28:21-24, 29:16-33, 39:45-55, 42:49-43:28, 43:40-44:17, 58:11-32, 64:5-34</p> <p><i>See, e.g.</i>, 193 Patent, Figs. 1A-1C-4, 2A-2B, 3-9, 13, 14, 20, 21, 25-27</p>	<p>“a step that creates a mixture of the substrate molecule and reagents contained in the at least one plug fluid”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'193 Patent</u></p> <p>Claims 1 and 12.</p> <p>2:38-43, 3:31-32 & Fig. 1A, 3:53-56 & Fig. 5, 3:63-4:9 & Fig. 7, 5:16-25 & Fig. 27, 10:1-5, 11:64-12:8, 13:64-14:4, 17:37-44 & Fig. 2A, 17:65-18:13, 18:14-37 & Fig. 3, 18:60-19:6 & Fig. 5, 22:1-5 & Fig. 7, 22:27-44 & Figs. 8 and 9, 38:17-19, 39:31-55, 47:62-64, 58:11-32 & Fig. 20.</p> <p><u>'193 Patent Reexamination</u></p> <p>Patentee Response (June 12, 2018), Ex. 2001 (Sia Decl.) ¶ 96.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
		<p><u>IPR2015-01163</u></p> <p>Patent Owner Preliminary Response (Paper No. 9) at 7-9, 40-41.</p> <p><u>US Patent No. 7,901,939 File History</u></p> <p>Amendment (Sept. 19, 2008) at Claims and 10-11.</p>
<p>“target DNA or RNA molecule” / “target DNA or RNA molecules”</p> <p>148 Patent, claims 1, 3</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 148 Patent, 21:40-44, 30:58-31:20, 31:60-32:6, 34:35-42, 44:58-61, 45:65-46:7, 46:29-32, 51:48-52:7, 52:34-40, 52:46-49</p> <p><i>See, e.g.</i>, 148 Patent File History:</p> <ul style="list-style-type: none"> • December 16, 2013 Non-Final Rejection • February 14, 2014 Applicant Amendment/Request for Reconsideration After Non-Final Rejection <p><i>See, e.g.</i>, Nakano et al. “Single-molecule PCR using water-in-oil emulsion”. J. Biotech., 2003, v. 102, pp. 117-124, at 117-118.</p> <p><i>See, e.g.</i>, Beer et al. "On-Chip, Real-Time, Single-Copy Polymerase Chain Reaction in Picoliter Droplets". Anal. Chem. 2007. v. 79, pp. 8471-8475 at 8471, 8475</p>	<p>Indefinite</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'148 Patent</u></p> <p>Claims 1 and 3.</p> <p>20:14-22, 44:18-26, 45:65-46:9, 51:48-52:7, 52:34-40, 52:46-55, 54:13-28, 54:29-59, 68:43-58.</p> <p><u>'148 Patent File History</u></p> <p>Final Rejection (Aug. 29, 2013) at 3-4, 6.</p> <p>Request for Continued Examination (Nov. 27, 2013) at 2, 4-5.</p> <p>Non-Final Rejection (Dec. 16, 2013) at 4-5, 7.</p> <p>Amendment & Response to Office Action (Feb. 14, 2014) at 2, 4-6.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<p><i>See, e.g.</i>, Burns, Mark et al., "An Integrated Nanoliter DNA Analysis Device", Science, vol. 282, 1998, pp. 484-487.</p> <p><i>See, e.g.</i>, Kalinina et al. "Nanoliter scale PCR with TagMan detection". Nucleic Acids Research, 1997, v. 25, No. 10, pp. 1999-2004.</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,130,098 to Handique et al., 1:31-32; 9:56-66; 10:4-15.</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,057,149 to Burns et al., 1:23-24; 6:26-52.</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,140,053 to Koster, Abstract; 4:58-67; 7:63-8:60; 9:9-37.</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,140,053 to Koster, Figs. 2, 3, 4A, 4B</p>	
<p>"orifice" / "injection orifice"</p> <p>780 Patent, claims 10, 22, 34; 365 Patent, claim 11</p>	<p>Plain and ordinary meaning.</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent, 6:45-50; 6:63-7:3; 10:10-18.</p> <p><i>See, e.g.</i>, 365 Patent, 6:61-64; 7:9-15; 10:24-32.</p>	<p>"a hole to permit fluid flow" / "a hole to permit fluid flow by force"</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents¹</u></p>

¹ The '780 and '365 Patents have the same specification. For ease of reference, Dropworks cites to the '780 Patent specification in support of its proposed constructions for both patents.

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<p><i>See, e.g.</i>, 780 Patent, Fig. 3</p> <p><i>See, e.g.</i>, 365 Patent, Fig. 3</p> <p><i>See, e.g.</i>, 780 Patent, claims 1, 2, 3</p> <p><i>See, e.g.</i>, 780 Patent File History</p> <ul style="list-style-type: none"> • U.S. Patent No. 7,041,481, 6:43-46 • July 23, 2009 Applicant Arguments/Remarks Made in an Amendment • April 26, 2010 Notice of Allowance and Examiner's Amendment 	<p>6:37-50 & Fig. 3.</p> <p><u>'780 Patent File History</u></p> <p>Amendment/Response to Office Action (July 23, 2009), Remarks at 14-15.</p> <p><u>US Patent No. 7,041,481 File History</u></p> <p>Non-Final Rejection (Oct. 17, 2005) at 2.</p> <p>Amendment (Jan. 9, 2006) at Claims and 7.</p>
<p>“channel” / “microchannel”</p> <p>780 Patent, claims 22, 27, 28, 30, 32-36, 39, 47, 48; 365 Patent, claims 11, 12, 15, 17</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent 3:35-38; 6:51-7:12; 8:51-57; 9:34-47; 9:63-64, 10:3-7</p> <p><i>See, e.g.</i>, 365 Patent 3:53-55; 9:58-60; 10:8-10; 10:16-20; 10:8-10, 10:16-20.</p> <p><i>See, e.g.</i>, 780 Patent, claims 1, 2, 3, 4, 5, 6, 29.</p> <p><i>See, e.g.</i>, 780 Patent, Figs. 3, 4, 5A, 5B.</p> <p><i>See, e.g.</i>, 780 Patent File History</p> <ul style="list-style-type: none"> • May 9, 2008 Preliminary Amendment, Claim 34 	<p>“a groove in a substrate” / “a channel of micrometer dimensions”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>8:31-54 & Fig. 4, 8:60-65.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<ul style="list-style-type: none"> July 23, 2009 Applicant Arguments/Remarks Made in an Amendment April 26, 2010 Notice of Allowance <p><i>See, e.g.</i>, 365 Patent File History</p> <ul style="list-style-type: none"> September 27, 2010 Preliminary Amendment, Claim 62 November 16, 2011 Amendment, Claim 15 <p><i>See, e.g.</i>, U.S. Patent No. 6,130,098 to Handique et al., 15:43-45</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,057,149 to Burns et al., 8:63-66</p>	
<p>“tube”</p> <p>780 Patent, claims 22, 27-29, 32-36, 39, 47; 365 Patent, claim 11, 12, 14, 17</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent 3:35-38; 6:51-7:12; 8:51-57; 9:34-47; 9:63-64, 10:3-7.</p> <p><i>See, e.g.</i>, 365 Patent 3:53-55; 9:58-60; 10:8-10; 10:16-20; 10:8-10, 10:16-20.</p> <p><i>See, e.g.</i>, 780 Patent, claims 1, 2, 3, 4, 5, 6, 29.</p> <p><i>See, e.g.</i>, 780 Patent, Figs. 3, 4, 5A, 5B</p> <p><i>See, e.g.</i>, 365 Patent Fig. 5A, 5B</p>	<p>“a long hollow cylinder”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>6:51-62 & Fig. 3.</p> <p><u>'780 Patent File History</u></p> <p>Amendment/Response to Office Action (July 23, 2009), Remarks at 16.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<p><i>See, e.g.</i>, 780 Patent File History</p> <ul style="list-style-type: none"> • March 24, 2009 Non-Final Rejection • July 23, 2009 Applicant Arguments/Remarks Made in an Amendment • April 26, 2010 Notice of Allowance <p><i>See, e.g.</i>, U.S. Patent No. 6,130,098 to Handique et al., 15:43-45</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,057,149 to Burns et al., 8:63-66</p>	
<p>“continuous tube”</p> <p>780 Patent, claim 29; 365 Patent, claim 14</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent 3:35-38; 6:51-7:12; 8:51-57; 9:34-47; 9:63-64, 10:3-7.</p> <p><i>See, e.g.</i>, 365 Patent 3:53-55; 9:58-60; 10:8-10; 10:16-20; 10:8-10, 10:16-20.</p> <p><i>See, e.g.</i>, 780 Patent, Figs. 3, 4, 5A, 5B</p> <p><i>See, e.g.</i>, 780 Patent, claims 1, 2, 3, 4, 5, 6, 29.</p> <p><i>See, e.g.</i>, U.S. Patent No. 7,041,481, Claims 4, 5, 6</p> <p><i>See, e.g.</i>, U.S. Patent No. 6,130,098 to Handique et al., 15:43-45</p>	<p>“a tube with one end that connects to its other end, allowing contents to circulate”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>6:51-58 & Fig. 3.</p> <p>'780 Patent, claims 1, 4-6, 22, 29, 30.</p> <p>'365 Patent, claims 1, 14, 15.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<i>See, e.g.</i> , U.S. Patent No. 6,057,149 to Burns et al., 8:63-66	
<p>“microfluidic device”</p> <p>780 Patent, claim 47</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent, 2:14-40; 6:37-7:24; 7:58-67; 8:31:54; 9:8-11; 9:24-41.</p> <p><i>See, e.g.</i>, 780 Patent File History</p> <ul style="list-style-type: none"> April 26, 2010 Notice of Allowance 	<p>“a device for manipulating fluid samples and reagents, wherein the fluid flows through a structure having a cross-section of micrometer dimensions”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>8:60-65.</p> <p><u>'780 Patent File History</u></p> <p>Notice of Allowability & Examiner's Amendment (Apr. 15, 2010) at 14.</p>
<p>“microdroplet”</p> <p>780 Patent, claims 22, 24, 25, 27, 28, 34-36, 38-40, 47-51; 365 Patent, claims 11, 12</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.</i>, 780 Patent, 3:23-38; 5:16-31; 5:50-62; 6:45-7:12; 7:36-67; 8:1-30; 8:55-9:23; 9:52-60.</p> <p><i>See, e.g.</i>, 365 Patent, 3:41-55, 5:31-45, 5:64-6:9, 6:59-7:24, 7:49-8:13, 8:14-43, 9:1-36, 9:65-10:6.</p> <p><i>See, e.g.</i>, 780 Patent File History</p> <ul style="list-style-type: none"> April 26, 2010 Notice of Allowance 	<p>“a droplet having a cross-section of micrometer dimensions”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>5:21-25, 8:60-65.</p> <p>'780 Patent, claims 22, 24, 25, 48, 51.</p> <p><u>'780 Patent File History</u></p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
		<p>Amendment/Response to Office Action (July 23, 2009), Remarks at 14-15.</p> <p>Notice of Allowability & Examiner's Amendment (Apr. 15, 2010) at 14.</p>
<p>"heater" / "cooler"</p> <p>780 Patent, claims 33, 38; 365 Patent, claim 17</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See, e.g.,</i> 780 Patent, 6:51-58; 7:58-67; 9:24-41.</p> <p><i>See, e.g.,</i> 365 Patent, 6:65-7:4, 8:4-13, 9:37-54.</p> <p><i>See, e.g.,</i> 780 Patent, Fig. 3</p> <p><i>See, e.g.,</i> 365 Patent, Fig. 3</p> <p><i>See e.g.,</i> 780 Patent, claim 4</p>	<p>"a region in which the temperature of a sample partition is raised/lowered"</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'780 and '365 Patents</u></p> <p>6:51-58 & Fig. 3.</p> <p><u>'780 Patent File History</u></p> <p>Amendment/Response to Office Action (July 23, 2009), Remarks at 12-13.</p>
<p>"diameter of the droplets"</p> <p>394 Patent, claim 25</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See e.g.,</i> 394 Patent, 8:33-52; 18:65-19:10.</p> <p><i>See e.g.,</i> 394 Patent, claims 2, 5, 12, 14, 17, 21, 22, 26, 29</p> <p><i>See, e.g.,</i> U.S. Provisional Application No. 61/277,203, 13:3-16; 34:6-9.</p>	<p>"diameter of the droplets if not artificially constrained"</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'394 Patent</u></p> <p>5:10-14, 6:35-49, 6:59-7:9, 8:33-52, 18:31-35, 18:65-19:8, 26:34-60, 27:4-15, 27:19-36, 29:15-17.</p> <p>Claims 1, 2, 5, 14, 17, 21, 22, 25, 26, 29.</p>

Claim Term(s)	Plaintiffs' Proposed Construction and Supporting Intrinsic Evidence	Defendant's Proposed Construction and Supporting Intrinsic Evidence
	<p><i>See, e.g.</i>, U.S. Patent No. 9,156,010, 11:58-12:6.</p>	<p><u>U.S. Patent No. 9,156,010</u></p> <p>11:67-12:6, 38:14-20, 40:28-30, 119:58-62, 120:25-37.</p> <p><u>'394 Patent File History</u></p> <p>Remarks (Dec. 11, 2014) at 14.</p>
<p>“confluence region”</p> <p>394 Patent, claims 25, 28, 30</p>	<p>Plain and ordinary meaning</p> <p><u>Intrinsic Evidence:</u></p> <p><i>See e.g.</i>, 394 Patent, 4:21-35; 6:9-29; 6:59-7:9; 24:65-25:9; 28:45-67; 29:1-14.</p> <p><i>See e.g.</i>, 394 Patent, Claims 4, 6, 9, 13, 16, 23, 33.</p> <p><i>See, e.g.</i>, Provisional Application No. 61/467,347, 15:6-11</p> <p><i>See, e.g.</i>, Provisional Application No. 61/317,635, 7:5-16.</p>	<p>“a region formed at a junction between two or more channels each carrying one or more fluids”</p> <p><u>Intrinsic Evidence:</u></p> <p><u>'394 Patent</u></p> <p>4:32-35, 6:21-7:9, 17:48-18:6, 18:36-54, 24:59-25:9, 25:62-26:27, 26:55-58, 27:19-32, 27:58-62, 28:53-29:17, 29:36-44, Figs. 12, 17-18, 20-24.</p> <p>Claims 1, 4, 6, 13, 16, 18, 25, 28, 30.</p> <p><u>Provisional Application No. 61/317,635</u></p> <p>6:9-10.</p> <p><u>'394 Patent File History</u></p> <p>Remarks (June 10, 2015) at 13-14.</p>

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